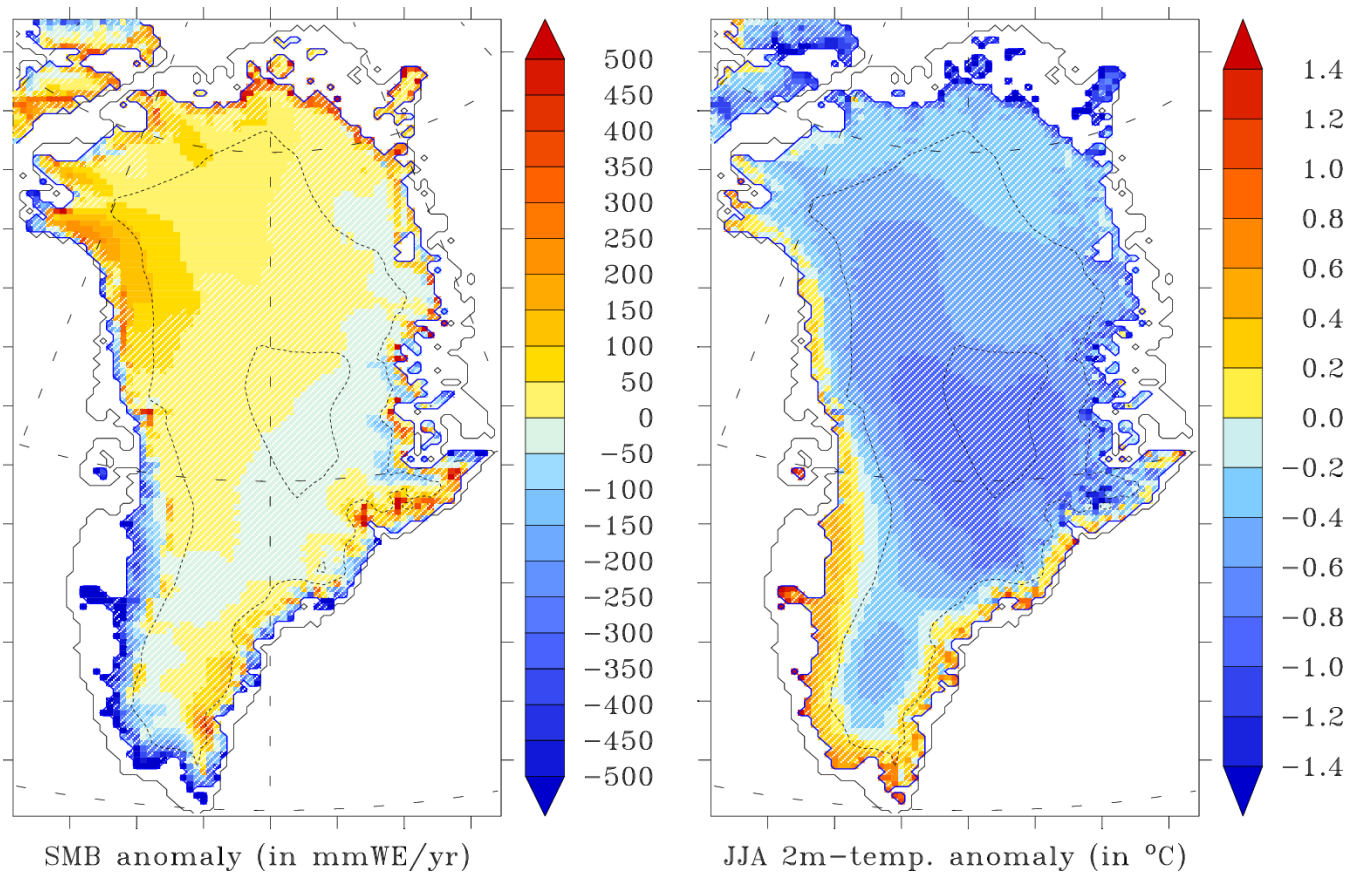
SUPPLEMENTARY MATERIAL of

Brief Communication: "Reduction of the future Greenland ice sheet surface melt with the help of solar geoengineering"

Xavier Fettweis[1], Stefan Hofer[1,2], Roland Séférian[3], Charles Amory[1,4], Alison Delhasse[1], Sébastien Doutreloup[1], Christoph Kittel[1], Charlotte Lang[1], Joris Van Bever[1,5], Florent Veillon[1], Peter Irvine[6]

[1]SPHERES research units, Geography Department, University of Liège, Liège, Belgium
[2]Department of Geosciences, University of Oslo, Oslo, Norway
[3]CNRM, Université de Toulouse, Météo-France, CNRS, Toulouse, France
[4]Univ. Grenoble Alpes, CNRS, Institut des Géosciences de l'Environnement, Grenoble, France
[5]Earth System Science, Departement Geografie, Vrije Universiteit Brussel, Brussels, Belgium
[6]Earth Sciences, University College London, London, UK

Correspondence to: Xavier Fettweis (xavier.fettweis@uliege.be)

15 **Fig S1: Annual SMB (in mmWE/yr) and summer 2m-temperature anomaly (in °C) of MAR forced by CNRM-ESM2-1 vs MAR forced by ERA5 over 1981-2100. The anomalies lower than the 1981-2010 interannual variability are hatched. All the anomalies are lower than 2 times the interannual variability and are then not statistically significant. The ice-sheet margins are represented by a blue line.**